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| 10/700,127 | 10/31/2003 | Joan M. Zanghi | 86861RLW | 3702 |

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EXAMINER

NGUYEN, MADELEINE ANH VINH

| ART UNIT | PAPER NUMBER |
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2625

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

This communication is responsive to amendment filed on March 13, 2006.

Applicant cancels claims 16-20, amends claims 1, 2, 4, 9, 11, 12, 13, 14, 15, and adds new claims 21-29.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-15, 21-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stokes (US Patent No. 5,881,209).

Concerning claim 14, Stokes discloses an apparatus (Fig.3) comprising a source for characterization for a device (target file, col. 6, lines 6-17); a computer (Fig.1) obtaining predetermined fixed uniform sample control values for the device (62, 64, Fig.6), producing dynamic control values from dynamically selected colors using the characterization (66-76, Fig.6), and producing a characterization target for the device having color regions having the dynamic control values and the predetermined fixed uniform sample control values (78-79, Fig.6).

Stokes does not directly teach that the dynamically selected colors being colorimetrically different than colors defined by the fixed uniform sample control values. However, Stokes

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teaches (step 74, Fig.6) “the hex cycling sequence should be selected so that the best colorant values are generated for colors of interest for anticipated applications. For example, one may wish to provide the best perceptual accuracy to flesh tones, followed by green grass, followed by blue sky, in which case the hex cycling order would be 1, 2, 3 ... “ (col. 8, lines 53-59). Thus, the dynamically selected colors are different from color defined by the fixed uniform sample control values since the hex cycling order is different. Stokes further teaches in step 76, Fig.6 the multiple nonlinear regressions used to compute the optimal colorant values for the profile (col. 9, lines 35-37). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to consider Stokes teach the limitation of the dynamically selected colors being colorimetrically different than colors defined by the fixed uniform sample control values as claimed since they are dynamically computed according to user’s selection and not selected from fixed uniform sample control values.

Claim 1 is method claim of apparatus claim 14. Claim 1 is rejected for the same rationales set forth for claim 14 above.

Concerning claims 2-8, Stokes further teaches the steps of combining the fixed control values for the device with the dynamic control values and producing the characterization target (in the new profile) from the dynamic control values and the fixed control values (78-79, Fig.6), (claim 2); providing dynamic colorimetric values for the dynamically selected colors and determining the dynamic control values for the colorimetric colors using the existing characterization (70-74, Fig.6, Figs.8-11), (claim 3); determined relative colorimetric values from the dynamic colorimetric values using a white point of a predetermined medium defined in the existing characterization; and determining the dynamic control values for the relative

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colorimetric values using a profile transform of the existing characterization (Figs.8-9), (claim 4); wherein the producing comprises providing the color regions in a topology having one of verification and device behavior characteristics (Figs.11-12; col. 8, lines 43-58; col. 9, line 35 – col. 10, line 13), (claim 5); wherein the existing output device characterization is an ICC profile (col. 1, line 64 – col. 2, line 10; col. 4, lines 40-55), (claim 6); the existing output device characterization is a characterization for a similar device (claim 7) or for a group of similar devices to which the device belongs (claim 8), (Fig.3; col. 4, lines 25-68).

Concerning claims 9-10, 12, 13, Stokes discloses a method for creating a dynamic output characterization target using an existing characterization for the device as discussed in claims 1-8. Stokes further teaches that the dynamically selected colors are a set of important colors (color of interest), (col. 8, lines 53-58).

Concerning claim 11, Stokes further teaches that the characterization target contains patches having a set of fixed control values (col. 2, lines 20-22; col. 6, lines 6-26).

Concerning claim 15, Stokes discloses a computer readable storage controlling a computer for performing the steps as in claim 1 above.

Concerning claim 21, Stokes further teaches the step of combining the predetermined control values for the device with the dynamic control values prior to said producing (74-79, Fig.6; col. 9, line 35 – col. 10, line 55).

Concerning claim 22, Stokes discloses a method comprising generating dynamic control values from dynamically selected colors using an existing characterization for a device (72-74, Fig.6, Figs.9, 11); producing a characterization target for the device (78-79, Fig.6), said target having first and second pluralities of color sets, said color set of the first plurality each having a

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respective one of the dynamic control values (colors of interest or flesh tones, green foliage, blue sky), and the color set of the second plurality each having a respective one of the predetermined fixed control values (color samples or black, white, red, magenta, blue, cyan, green and yellow), (Figs.6, 8, 9, 11, 12; col. 6, lines 5-68; col. 8, line 43 – col. 10, line 55).

Stokes does not directly teach first and second pluralities of color regions. However, Stokes teaches a second set of colors each having a respective one of the predetermined fixed control values (black, white, red, magenta, blue, cyan, green and yellow, Fig.5b) and a first set of colors having a respective one of the dynamic control values such that “the best colorant values are generated for colors of interest for anticipated applications.” (col. 8, lines 53-58) and the step of “multiple nonlinear regression used to compute the optimal colorant values for the profile.” (col. 9, lines 35-37). Specifically, Stokes teaches the first set of dynamically selected colors such as flesh tones, blue sky, green grass. Since these selected colors belong to different regions having flesh tone, blue sky or green grass, the set of colors can be considered as the set of color regions. It would have been obvious to one skilled in the art at the time the invention was made to consider the first and second sets of colors taught in Stokes are first and second pluralities of color regions since they are colorimetrically measurable as claimed and distinguished by different regions such as flesh tones, blue sky or green foliage.

Concerning claims 23-25, Stokes further teaches the steps of combining the fixed control values for the device with the dynamic control values; and producing the characterization target from the dynamic control values and the fixed control values (70-78, Fig.6, Fig.9, 11, 12); providing dynamic colorimetric values for the dynamically selected colors; and determining the dynamic control values for the colorimetric colors using the existing characterization (74, Fig.6,

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Fig. 11); determining relative colorimetric values from the dynamic colorimetric values using a white point of a predetermined medium defined in the existing characterization; and determining the dynamic control values for the relative colorimetric values using a profile transform of the existing characterization (70-76, Fig. 6, 100, Figs. 8, Figs. 9 and 11).

Concerning claims 26-28, Stokes further teaches that at least some of the important colors are non-neutral (flesh tones, blue sky, green grass, etc.); the important colors include skin colors, sky blue, foliage green and visual neutrals (col. 6, lines 23-26; col. 8, lines 56-58).

Concerning claim 29, Stokes discloses a method for creating a dynamic output device characterization target using an existing characterization for the device as discussed in claims 22-25 above.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

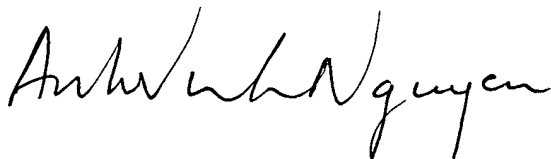
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeleine AV Nguyen whose telephone number is 571 272-7466. The examiner can normally be reached on Tuesday-Thursday 12:30-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Madeleine AV Nguyen
Primary Examiner
Art Unit 2625

May 25, 2006